

## ENVIRONMENTAL HEALTH ENGINEER II

### NATURE OF WORK

This is mid-level environmental engineering work.

Work involves responsibility for: writing federally approvable environmental permits for air, waste, wastewater and water; reviewing facility plans and engineering specifications for construction and operation of community water supply systems, and community, industrial, or feed lot sewage treatment facilities; reviewing engineering plans and industrial process to identify emissions/discharges and to determine appropriate pollution control equipment; recommending industrial process modifications to achieve pollution prevention and risk reduction to public health and environment; conducting monitoring strategies; modeling emissions/discharges; implementing risk management strategies; completing land use plan reviews to protect public health risks and environmental quality; determining business and industry compliance with environmental laws; assisting in developing civil penalty orders. Considerable independent judgment and personal initiative is expected when making technical decisions on environmental engineering problems in consultation with Senior Environmental Health Engineers and/or Environmental Health Supervisors. Supervision is received from a professional or an administrative superior and reviewed through written reports, conferences and results achieved.

### EXAMPLES OF WORK

Reviews and learns to write: Federal Clean Air Act Operating permits for Class I, complex Class II and Synthetic Minor Class II Air Pollution sources; Clean Water Act permits for industry, small communities and non-standard systems, and RCRA waste disposal site permits.

Reviews plans for expansion, increased input or output, changes in processes and chemicals, to determine Federal applicable requirements.

Reviews and writes operating and construction permits and recommends pollution control equipment requirements in consultation with a Senior Environmental Health Engineer.

Reviews engineering studies, remediation plans, laboratory analysis and specifications used to: manage waste, clean up property, develop emission factors, discharge limits and testing plans.

Uses GIS software and environmental databases to review land use plans for water quality and quantity, air quality, and public health risk reduction.

Conducts modeling, sampling and monitoring studies to identify public health and environmental risks/impacts; make recommendations pertaining to risk reduction for review by a Senior Environmental Health Engineer.

Conducts inspections of permitted facilities and investigates complaints.

Organizes and prepares enforcement action recommendations and assists with civil penalty orders and supplemental environmental project reviews.

Assists in preparing RFPs for contracting environmental modeling, sampling and monitoring.

As assigned, reviews changes in federal, state, and local laws to ensure environmental health programs maintain federally approved status.

Makes presentations on various environmental issues to the public, and various appointed or elected boards and officials on behalf of the Department.

Prepares special reports and grants.

Performs related work as required.

#### DESIRABLE KNOWLEDGE, ABILITIES AND SKILLS

Considerable knowledge of environmental engineering principles and practices as they apply to public health, environmental quality, and pollution prevention.

Considerable knowledge of federal, state and local laws pertaining to environmental quality and environmental health.

Considerable knowledge of the principles and practices of toxicology, risk assessment and risk communication.

Ability to use internet search engines, computer word processing, spreadsheet, database and application development, graphing, various modeling, and GIS software.

Ability to use engineering mathematics and statistical analysis, analyze data, conduct modeling, provide accurate interpretation of results, and summarize the analysis into report format.

Ability to establish and maintain effective working relationships with other government agencies, citizen committees, elected officials, the media, coworkers and the general public.

Ability to communicate effectively, both orally and in writing.

#### DESIRABLE TRAINING AND EXPERIENCE

Graduation from an accredited four-year college or university with major course work in environmental, civil or chemical engineering with additional course work in toxicology, risk assessment and meteorology, plus experience in environmental engineering work.

#### MINIMUM QUALIFICATIONS

Graduation from an accredited four-year college or university with major course work environmental, civil or chemical engineering and some experience in environmental engineering work; or any equivalent combination of training and experience which provides the desirable knowledge, abilities and skills.

## NECESSARY SPECIAL REQUIREMENTS

Possession of a valid State of Nebraska Operator's License when operating a vehicle may be necessary to the satisfactory performance of assigned duties for some positions within this classification.

Registration as an (E.I.T.)Engineer-in-Training by the State of Nebraska. If registered in another state must obtain Nebraska registration within one year of employment.

Approved by: \_\_\_\_\_  
Department Head Personnel Director

12/2002

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